

NORM FOR 40.00 HA BLOCK PLANTATION AGAINST THE DIVERSION OF FOREST LAND FOR NON FORESTRY PUSPOSE FOR CONSTRUCTION OF 400 KV/DC (TWIN) NEW MARIANI-NEW KOHIMA TRANSMISSION LINE UNDER GOLAGHAT DIVISAION AT DOYANG RESERVED FOREST UNDER JAMUGURI RANGE

Area: 40.00 Ha.

Spacing (m x m) : 2 x2

Number of Sapling/Ha: 2500

Lengh of Fence (RM) : 3987

Wage rate for the 1st year (Rs.) : 250.00

Increase in wage rate for subsequent years by a factor: 1.1

Appreciation of material costs by a facor: 1.1

Sl	Particulars of works	Unit	Qty/ Ha	Total Qty	Rate/ Unit	Amount (in Rs)
A. FRECTION OF FENCING					@Rs.250/Dls.	
1	(a) Cost of full Chain-linked Goat Proof fencing (4'ht with 10 Gauge, 3'dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt apart including transportation of fencing materials to site for 2500 RM @Rs.800 per RM as per estimate.	RMS		3987	800	3189600
2	(b) Waes of DLs for carrying, fitting, fixing etc of fencing materials @ 20 Dls/100 RM	Dls		795	250	198750
Sub-Total						3388350
B. INFRASTRUCTURE IN PLANTATION AREA					@Rs.250/Dls.	
1	Construction of camp hut (atleast one upto 25Ha & thereafter one per every 25ha) as per estimate	Nos		2	150000	300000
2	Installation of ring/tube well (atleast one upto 25Ha & thereafter one per every 25ha)	Nos		4	50000	200000
3	Irrigation facility with Diesel generator and hose pipes for watering the nursery and plantation (during dry spells)	Nos		1	50000	50000
4	Cost of tolls & implements (one unit upto 25 Ha & thereafter one unit per every 25 Ha)	Nos.		2	10000	20000
5	Cost of RCC signboard & Gate including fitting and fixing of the same (atleast one upto 25Ha & thereafter one per every 25ha)	Nos.		2	60000	120000
6	Camp accessories @ Rs.10,000/per camp	Nos.		2	10000	20000

7	Construction of Inspection Path 1300 Rm @Rs.50/-RM	RMS		1994	70	139580
8	Construction of staff quarters as per estimate (One unit for 10 to 50 Ha & thereafter one unit per every Ha)	Nos.		1	800000	800000
9	Provision of Solar energy for staff quarters including installation	Nos.		1	70000	70000
						1719580
C	ADVANCED WORK					
1	site selection, surveying, demarcation, jungle cutting, burning etc 20 Dls/ha	Dls	20	800	250	200000
	Preparation and acquisition of polypot saplings in the field nursery for planting 2500 Nos. Seedlings/Ha @Rs.6/- per polypot.	Nos.	2500	100000	6	600000
1					Sub Total	800000
2	Preparation of polypot saplings in the field nursery for vacancy filling.					
3	a) 25% mortality expected during 1st year (to be planted in the field during the 2nd year), i.e. 625 seedlings/ha @rs.6.5/- per polypot.	Nos.	625	25000	6.5	162500
4	b) 20% mortally expected during 2nd year (to be planted in the field during the 3rd year, i.e. 500 seedlings/ha @Rs.7/- per polypot.	Nos.	500	20000	7	140000
5	c) 15% mortally expected during 3rd year (to be planted in the field during the 4th year, i.e. 375 seedlings/ha @Rs.7.5/- per polypot.	Nos.	375	15000	7.5	112500
6	d) 10% mortally expected during 4th year (to be planted in the field during the 5th year, i.e. 250 seedlings/ha @Rs.8/- per polypot.	Nos.	250	10000	8	80000
7	Cost of Bamboo, making of stacking & transportation etc.	Nos.	625	25000	1	25000
8	Line alignment, carriage of stacking materials and fixing the stacking @ 5 Dls/ha	Dls	5	200	250	50000
	Supervision and Monitoring	L.S.				10000
	Sub Total					580000
1	D) CREATION & 1ST YEAR MAINTENANCE @Rs.250/Dls.					

2	Soil working carriage of stumps, polypot seedling and planting at the plantation site including, dibbing of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 Dls/ha.	Dls	40	1600	250	400000
3	5 weeding, mulching and fire protection works @ 18 Dls/ha/weeding	Dls	90	720	250	180000
4	Upkeepment of plantation and making of nspection path, repairing of fence etc on day to day basis @ 5Dls/ha	Dls	5	200	250	50000
5	Maintenance and protection of field nursery and watch and ward for the plantation area (Dls for 365 days)	Dls		365	250	91250
6	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records and other misc work.	L.S.				10000
	Awareness & monitoring @Rs.800/ha	L.S.		27.36	800	21888
	Sub Total					753138
1	E. 2nd YEAR MAINTENANCE @Rs.275/Dls.					
2	5 weedings, fire protection works @ 15 Dls/ha/weeding	Dls	75	3000	275	825000
3	25% Vacancy filling by 1 year old seedlings from nursery @ 10 Dls/ha	Dls	10	400	275	110000
4	Upkeepment of plantation and making of nspection path, repairing of fence etc on day to day basis @ 5Dls/ha	Dls	5	200	275	55000
5	Maintenance and protection of field nursery and watch and ward for the plantation area (Dls for 365 days)	Dls		365	275	100375
6	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				11000
7	Supervision Cost	L.S.				36000
	Contingency L.S	L.S.				2500
	Sub Total					1139875

1	F) 3rd YEAR MAINTENANCE @Rs.302.5/Dls.					
2	4 weedings, fire protection works @ 15 Dls/ha/weeding	Dls	60	2400	303	727200
3	20% Vacancy filling by 2 year old seedlings from nursery @ 8 Dls/ha	Dls	8	320	303	96960
4	Protection work, cattle, watering, upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 5 Dls/ha.	Dls	5	200	303	60600
5	Maintenance and protection of field nursery and watch and ward for the plantation area (Dls for 365 days)	Dls		365	303	110595
6	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				12100
7	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				2875
	Sub Total					1046330
1	4th YEAR MAINTENANCE @Rs.332.75/Dls.					
2	4 weedings, fire protection works @ 15 Dls/ha/weeding	Dls	60	2400	333	799200
3	15% Vacancy filling by 2 year old seedlings from nursery @ 6 Dls/ha	Dls	6	240	333	79920
4	Upkeepment of plantation and making of inspection path, repairing of fence etc on day to day basis @ 5Dls/ha	Dls	5	200	333	66600
5	Maintenance and protection of field nursery and watch and ward for the plantation area (Dls for 365 days)	Dls		365	333	121545
6	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				10211
7	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				3306
	Sub Total					1116782

1	5th YEAR MAINTENANCE @Rs.336.025/Dls.					
2	Climber cutting, fire protection and other silvicultural works 15 Dls/Ha	Dls	15	600	366	219600
3	10% Vacancy filling by 2 year old seedlings from nursery @ 4 Dls/ha	Dls	4	160	366	58560
4	Maintenance & fencing post replacement @3% initial cost of materials			3	3189600.00	95688
5	Upkeepment of plantation and making of nspection path, repairing of fence etc on day to day basis @ 4Dls/ha	Dls	4	160	366	53764
6	Watch and ward for the plantation area (1DL for 365 days)	Dls		365	366	133590
7	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				14641
8	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				3802
	Sub Total					615645
1	6th YEAR MAINTENANCE @Rs.402.62/Dls					
2	Climber cutting, fire protection and other silvicultural works 15 Dls/Ha	Dls	15	410.4	403	165391
3	Upkeepment of plantation and making of nspection path, repairing of fence etc on day to day basis @ 4Dls/ha	Dls	4	109.44	403	66738
4	Watch and ward for the plantation area (1DL for 365 days)	Dls		365	403	147095
5	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.	4			12356
6	Supervision Cost	L.S.		1		36000
	Contingency @ 15% over previous year	L.S.				4373
	Sub Total					431953
1	7th YEAR MAINTENANCE @Rs.442.88/Dls.					

2	Climber cutting, fire protection and other silvicultiural works 12 Dls/Ha	Dls	12	480	443	212640
3	Protection work, cattle, watering, upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 5 Dls/ha.	Dls	5	200	443	91765
4	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				17716
5	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				5028
	Sub Total					363149
1	8th YEAR MAINTENANCE @Rs.487.16/Dls.					
2	Climber cutting, fire protection and other silvicultiural works 10 Dls/Ha	Dls	8	320	487	161450
3	Protection work, cattle, watering, upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 5 Dls/ha.	Dls	5	200	487	97400
4	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				13310
5	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				5783
	Sub Total					313943
1	9th YEAR MAINTENANCE @Rs.535.87/Dls.					
2	Climber cutting, fire protection and other silvicultiural works 10 Dls/Ha	Dls	7	280	536	150080
3	Protection work, cattle, watering, upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 5 Dls/ha.	Dls	5	136.8	536	73325

4	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				16446
5	Supervision Cost	L.S.				36000
	Contingency @ 15% over previous year	L.S.				6650
	TOTAL					282501
1	10th YEAR MAINTENANCE @Rs.589.45/Dls.					
2	Climber cutting, fire protection and other silvicultural works 10 Dls/Ha	Dls	6	240	589	141360
3	Protection work, cattle, watering, upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 5 Dls/ha.	Dls	4	160	589	94240
4	Maintenance of camp huts, implements, ring/tube well upkeepment of plantation, signboard, documents, upkeepment of records etc.	L.S.				18090
5	Supervision Cost	L.S.				36000
Sub	Contingency @ 15% over previous year	L.S.				7648
	Total					297338
	Overhead cost @ 50% of total estimate					12848584
	GRAND TOTAL FOR RAISING 41.44 Ha					6424292
	Cost escalation of 10% annually has been considered for wages.					19272876

The norms should be revised annually based on wages rate & cost of materials
Pre-cast RCC pillar with 5" x 5" cross-section of 6ft height (1.5 below ground ^ 4.5 ft above ground) with readymade concrete base 1ft width for fixing

*Technically
Approved.*
AKA

Conservator of Forests
Eastern Assam Circle
Jorhat

[Signature]
Divisional Forest Officer
Golaghat Division
Golaghat